

Abstract

Lithographic Apparatus and Method to Determine Beam Characteristics

5 A lithographic apparatus is provided that has an aperture, a detector configured to
detect an intensity of a radiation beam directed through the aperture and a processor
configured to vary the intensity of the radiation beam through the aperture by a relative
movement of the radiation beam and the aperture and to calculate a beam size of the
radiation beam from the detected intensity and relative movement. Alternatively or in
10 addition, a lithographic apparatus may include a focusing element configured to focus a
part of a radiation beam in a focus plane, an aperture arranged in the focus plane of the
focusing element, a detector configured to detect an intensity of the part of the radiation
beam through the aperture, and a processor configured to vary the intensity of the radiation
beam through the aperture by a change in a pointing direction of the radiation beam and to
15 calculate a beam divergence of the radiation beam from the detected intensity and pointing
direction. The apparatus offers a means to determine beam quality characteristics such as
beam size and/or beam divergence.